

These are illustrated by half-tone plates, some of them in colors. While the technical names are in Latin and some of the data in English, the main portion of the text is in Japanese which renders the publications difficult to consult. The general typography and make-up leave little to be desired.— W. S.

**The Annual Report of the National Association of Audubon Societies.**<sup>1</sup>— When one looks over the bulky report of the Association for the year 1914 and reads of receipts and expenditures totalling \$90,000, and then harks back some eighteen years, when two State societies and some scattered individuals were struggling along, with scarcely any receipts but unlimited opportunities for expenditures, it seems hard to realize the tremendous breadth and power of the organization that has developed from the hard work of these few pioneers.

We cannot do justice to the report in the short space of a review and recommend that all of our readers study it in detail. We shall merely call attention to some of the more salient features. Among publications distributed during the year, are 2,358,000 educational leaflets, 2,078,000 colored bird pictures and 1,619,000, outline drawings for coloring.

On the protected gull colonies of Maine it is estimated that there were in 1914, 59,420 adult Herring Gulls and in the Laughing Gull colonies in the south 118,400 individuals, besides other species in proportionate numbers.

The Junior Audubon Societies have a total enrollment to date of 115,039 members and subscriptions for the continuance of this work during the year have been made — \$5000 by Mrs. Russell Sage for the south and \$20,000 by an unnamed patron for work in the northern schools.

A new department of "Applied Ornithology," has been started with Mr. Herbert K. Job in charge, with the object of instructing the public in practical methods of attracting birds and in raising wild game birds.

Trained field agents of the Association — Messrs. Arthur H. Norton, Winthrop Packard, Katharine H. Stuart, Eugene Swope, and William L. Finley present reports of great interest and the reports of secretaries of twenty-five State societies close this most encouraging record of bird protection.— W. S.

**Recent Literature on Bird Protection.**— Three publications of the U. S. Department of Agriculture deserve notice in this connection. 'Bird Houses and How to Build Them'<sup>2</sup> by Ned Dearborn is a welcome pamphlet giving just the information that hundreds of people are asking for in connection with their efforts to attract birds to their grounds. The usual publication 'Game Laws for 1914'<sup>3</sup> contains a convenient summary of game legislation throughout the United States and Canada, revised to date. A third Government publication is the 'Report of the Gover-

<sup>1</sup> Tenth Annual Report of the National Association of Audubon Societies, Inc. Bird-Lore, Nov.-Dec., 1914, pp. 481-565.

<sup>2</sup> Farmers' Bulletin, No. 609, published September 11, 1914.

<sup>3</sup> Farmers' Bulletin, No. 628, published October 20, 1914.

nor of Alaska on the Alaskan Game Law,' with an appendix giving all information relative to hunting and collecting in the territory.

'California Fish and Game,' a new publication of the State Fish and Game Commission,<sup>1</sup> contains many timely articles including one by Joseph Grinnell on 'Bird Life as a Community Asset' which is well worth careful perusal. The 'Hingham Journal' for October 2, 1914, states editorially that thanks to the efforts of Mr. Alexander Pope an extensive bird sanctuary has been established in Hingham, Mass.

Mr. W. L. Finley's 'Oregon Sportsman' and the 'Bulletins' of the District of Columbia and New Jersey Audubon Societies continue to keep the public interested in matters of bird and game preservation in their respective communities.

'Bird Notes and News,' the British quarterly, is full of information on the plume trade and bird protection abroad. The autumn number conveys the unwelcome information of the failure of the plumage prohibition bill to come to a final vote in Parliament on account of the war. The passage of the bill was assured but the policy of delay so successfully carried out by its opponents, which under ordinary circumstances would have had no ultimate effect, has under the extraordinary conditions now prevailing, caused its adoption to be postponed until another session.—W. S.

**Studies in Egg Production in the Domestic Fowl.**—The Staff of the Maine Agricultural Experiment Station have continued their investigations on this important problem and some of their recent publications contain data of considerable interest to students of inheritance as well as to ornithologists and such oölogists as concern themselves with anything beyond the external shell of the egg. In a paper by Drs. Raymond Pearl and Frank M. Surface<sup>2</sup> it is ascertained that eggs are relatively more variable in length than in breadth and considerably more in shape than in either of the linear dimensions while in weight and volume they vary more than in any of the other characters.

The whole process of egg laying is analyzed and many interesting data are presented.

A paper on somewhat similar lines by Maynie R. Curtis<sup>3</sup> discusses the variation among eggs of the same bird and in eggs laid in consecutive months, and the individuality of eggs of the same bird.

Dr. Pearl also discusses 'Improving Egg Production by Breeding'<sup>4</sup> and 'The Brooding Instinct in its Relation to Egg Production.'<sup>5</sup>—W. S.

<sup>1</sup> Edited by H. C. Bryant, Museum Vert. Zool., Univ. of Cal., Berkeley, Cal.

<sup>2</sup> Variation and Correlation in the Physical Characters of the Egg. U. S. Dept. of Agriculture, Bureau of Animal Industry, Bull. 110, pt. III. July 31, 1914.

<sup>3</sup> Factors Influencing the Size, Shape and Physical Constitution of the Egg of the Domestic Fowl. (Reprinted from Ann. Report, Maine Agr. Exper. Sta., 1914.)

<sup>4</sup> Reprinted from Ann. Report, Maine Agr. Exper. Sta., 1914.

<sup>5</sup> Reprinted from Journal Animal Behavior, July-Aug., 1914.